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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Himanshu S. Amin
Amin & Turocy, LLP
National City Center, 24th Floor
1900 East Ninth Street
Cleveland, OH 44114

EXAMINER	
BAYERL, RAYMOND J	

ART UNIT	PAPER NUMBER
2173	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/055,538	WONG ET AL.	
	Examiner	Art Unit	
	Raymond J. Bayerl	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1, 4 - 53* is/are pending in the application.

4a) Of the above claim(s) *11 - 14, 21 - 29, 41 - 42, 48 - 51* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4 - 10, 15 - 20, 30 - 40, 43 - 47, 52, 53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Applicant's indicates that the election of invention group I that was made prior to previous office action was made with traverse, with no additional remarks presented. However, the Examiner deems that the two additional inventions that were not elected would represent an undue burden to examine with the one elected, owing to the separate utility found in the subcombination claims. Therefore, the restriction requirement remains, and is made FINAL.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 45 - 47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In an attempt to alleviate the difficulty caused by claims directed, simply, to a "data packet" and "memory" (these not referring to one of the statutory classes of invention but instead to information *per se*), applicant has introduced the phrase "computer-readable medium having computer executable instructions for employing a" in each of the claims.

However, this does not result in a statutory "machine" or "article of manufacture" claim, when the claim is considered in light of applicant's disclosure. At page 6, line 24, applicant specifies that "computer readable media" can include "carrier waves". These "carrier waves", rather than tangibly embodying the information, are merely a transient phenomenon in which the information signal is non-tangibly fixed. Thus, the claims remain directed to information *per se*.

4. Claims 1, 4 - 6, 8 - 10, 43, 44, 52, 53 are rejected under 35 U.S.C. 102(e) as being anticipated by Jain et al ("Jain"; U.S. Patent Number 6,567,980).

As per independent claim 1 (and see also independent claim 6), Jain discloses a VIDEO CATALOGER SYSTEM that facilitates non-linear viewing of media, the system comprising:

a scene selector that scans a digitized media and selects a scene in the digitized media (col. 2 lines 10-19): Using advanced media analysis algorithms that automatically watch, listen to and read a video stream, the multimedia cataloger intelligently extracts metadata-keyframes, time codes, textual information and an audio profile from the video in real-time. The media analysis in Jain uses "at least one of...item recognition", to satisfy the alternatives list in the claim. The algorithms serve to "select" digitized media for various categories of inclusion.

Jain then teaches a metadata generator that produces metadata associated with the selected scene and relates the metadata to the selected scene (col. 2 lines 6-9): [T]here is a media cataloging and media analysis application which performs real-time, or non-real-time, **indexing** and distribution of video across an enterprise.

The result is that Jain provides an organizer that places the selected scene and the metadata in a media store to facilitate non-linear viewing of one or more scenes (col. 2 lines 20-23): This information becomes the foundation of a

rich, frame-accurate index that provides immediate, non-linear access to any segment of the video.

As per claim 4, Jain discloses that the recognition is adapted by a machine learning technique based, at least in part, on the input from the user (Table 1 col. 7; col. 7 lines 7-12): unique metadata can be defined and added to the Video Cataloger 110 by a user. Custom metadata tracks could include information provided in collateral data to the video. These metadata tags allow the user to search digital videos, and they are inputted by the user, after which the computer has "learned" them.

Concerning claim 5, Jain discloses the metadata generator produces at least one of...an item name (col. 6 lines 2-5): The Vidsync daemons also are responsible for returning certain pieces of information to the Cataloger, such as the actual start time, and a digital video **asset ID or name** for later use.

As per claim 8, Jain discloses selecting the scene from the set of digitized media by the above-noted analysis that is applied to the video that is received for cataloging. This results in automatically selecting the scene based on at least one of...item recognition and, as in claim 9, in associating at least one of...an item...with the selected scene.

Concerning claim 10 (and see also claim 36), Jain teaches at least one of, a database and a datacube (col. 3 lines 60-67): Metadata Server 130: may be as simple as a file system containing hypertext markup language

(HTML) files, or as complex as a relational database supporting a client-server application environment for media management.

As per independent claim 43, Jain necessarily involves data structure that facilitates non-linear viewing of media items, the data structure comprising:

a first field that holds a media item (to generate Figure 2's item 176); and

a second field that holds a metadata item related to the media item, where the metadata facilitates locating a related media item (as in Figure 2 item 178), by at least one of identifying the media item. The metadata serves both the purposes of "identifying" (claim 52) and "locating the media item" (claim 53).

Concerning independent claim 44, Jain also involves a method of providing and selecting from a set of graphical user interface elements on the display in returning desired content from the cataloged collection, the method comprising:

retrieving a set of graphical user interface elements, each of the interface elements representing an action associated with facilitating the non-linear display of media items (col. 2 lines 20-24): This information becomes the foundation of a rich, frame-accurate index that provides immediate, non-linear access to any segment of the video.;

displaying the set of interface elements on the display (Figure 2);

receiving an interface element selection signal indicative selecting a selected entry from the set of interface elements (col. 4 lines 26-28): A panel 172 displays the live video being digitized, with play, stop, etc. controls

that interact remotely with the analog source via a deck controller 240 (FIG. 3).; and

initiating processing to facilitate non-linear viewing of media based, at least in part, upon stored metadata, this being the associated metadata that is used in Jain's catalog.

5. Claims 45-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Morris ("Morris"; U.S. Patent Application: 2002/0088000).

As per independent claim 45 (and see also independent claim 46), Morris, in providing CONTROLED ACCESS TO IMAGE METADATA, uses a data packet adapted to be transmitted between two or more computer components that facilitate annotating a media and facilitate the non-linear viewing of the media, the data packet comprising:

a first field that stores a clip identifier (Figure 2 item 52), in that the header of a data packet is used to identify that this is a new packet, and the packet contains new information of the media;

a second field that stores a metadata key that identifies an annotating metadata associated with the clip identified by the clip identifier (Figure 2 items 60 & 62; paragraph 20): The metadata for the images is preferably stored within the image file 50 in individual **image tags 60**, each of which store various types of data that **correspond and relate to** particular captured image data 54.; and

a third field that stores data associated with the clip identified by the clip identifier (Figure 2 item 54)--this is the field where the actual data is stored.

As per independent claim 47 in addition to the above-noted "first field" for a "clip identifier" and "field that stores metadata", Morris's data arrangement also uses a field that stores a requested user action concerning the portion identified by the clip identifier (Figure 2 items 60 & 62; paragraph 20), since in transmitting a request for a metadata-annotated item in Morris, "user action" will also be specified.

6. Claims 7, 15 – 20, 30 – 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Duncombe et al ("Duncombe"; U.S. Patent Number 6,813,745).

As per claim 7, Jain discloses a method for cataloging digital media into a storage device to allow the user to retrieve non-linear clips. This allows the user to quickly search and find digital data.

The difference between the claims and Jain is the claims recite "manually scanning one or more scenes from the set of digitized media; and manually selecting the scene."

Duncombe teaches a media system for storing electrical files that allow the user to enter search descriptions for digital retrieval similar to that of Jain. In addition, Duncombe discloses (col. 3 lines 13-14): FIG. 8 is a flow diagram showing the steps taken by a user to **select and view** a plurality of suitable media clips.

It would have been obvious to one of ordinary skill in the art to modify the viewing GUI taught by Jain to permit the user to perform manual selections of the media file as per Duncombe, in order to obtain a system that automatically or manually allows the

user to manipulate and operate a digital media storage, thus improving flexibility and user options available.

Concerning independent claim 15, Jain discloses a method for cataloging digital media into a storage device to allow the user to retrieve clips in a non-linear fashion. This allows the user to quickly search and find digital data. In addition, Jain teaches a scene retriever that retrieves one or more scenes and one or more pieces of annotating metadata associated with the one or more scenes from a media store, as per the metadata annotations, provided by a metadata analyzer that can identify one or more relationships between the one or more pieces of annotating metadata (col. 2 lines 6-9 & col. 2 lines 27-30): In one aspect of the invention, there is a media cataloging and media analysis application which performs real-time, or non-real-time, indexing and distribution of video across an enterprise. Synchronized encoding and indexing allows users to intelligently **navigate through** the video by **using the index** to go directly to the exact point of interest, rather than streaming it from start to finish. The metadata serves to find media in Jain that are of a similar nature, and thus, have relationships between them.

The difference between the claims and Jain is the claims recite "a playlist generator that evaluates the one or more relationships and produces a playlist of related scenes, one or more viewers for viewing a scene listed in the playlist, one or more feedback receivers for receiving a feedback concerning the viewed scene; and a playlist updater for updating the playlist based, at least in part on the feedback."

Duncombe teaches a system that allows the user to browse through video clips by receiving user feedback, which is similar to that of Jain. In addition, Duncombe teaches a playlist generator that evaluates the one or more relationships and produces a playlist of related scenes (col. 2 lines 34-36): The method includes the steps of first organizing and formatting a plurality of media clips, one or more viewers for viewing a scene listed in the playlist (col. 2 lines 35-36): and then playing the plurality of media clips based upon input supplied by the user., one or more feedback receivers for receiving a feedback concerning the viewed scene to direct a playlist updater (col. 2 lines 50-55): Once the plurality of suitable media clips have been played, the media system uses a means for soliciting feedback and a means for accepting feedback from the user, and a means for reselecting the plurality of suitable media clips based upon the feedback of the user.

It would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the viewing GUI taught by Jain to allow the user to search media files with the playlist and feedback control of Duncombe, in order to obtain a system that has the ability to generate a set of digital media clips that are in better accord with actual user desires.

Concerning claims 16, 38, Jain/Duncombe discloses output on at least one of, an active device and a passive device (Duncombe, Figure 1 item 90, Figure 2 item 90,

Jain, Figure 2). As per claim 17, the viewing arrangements of Jain/Duncombe are also at least one of, an intelligent device and a non-intelligent device (see also claim 37).

The input in claim 18 that is at least one of, a touch input, a typed input, a mouse input, a voice input and a facial expression input concerning the viewed scene reads upon Duncombe (col. 6 lines 53-60): a data input mechanism 72, such as a keyboard 72 and a mouse 72A. A similar line of reasoning applies to claim 40.

As per claim 19, Jain in view of Duncombe discloses that the feedback concerns a current scene and also that the feedback comprises at least one of, a command to skip ahead in the playlist, a command to skip back in the playlist, a command to generate a new playlist, a command to find scenes similar to the current scene and a command to play a longer scene related to the current scene (Jain, col. 4 lines 27-30): A panel 172 displays the live video being digitized, with play, stop, etc. controls that interact remotely with the analog source via a deck controller 240 (FIG. 3). Responsive to such feedback, the playlist updater of Duncombe adds and/or removes a scene from the playlist based on at least one of, a usage data, a feedback command and a time stamp as in claim 20 (Duncombe, Figure 2 item 112, or Figure 13).

As per independent claim 30, the Jain "media database" as played by the Duncombe "playlist" would be populated by "video segments" being "associated with annotating metadata" under the control of an "annotating tool". Such Jain-style annotation will be "based on at least one of...item recognition", so that the annotating metadata comprises at least one of...an item identifier, as in claim 31.

As per claim 32, the production of annotation data in response to user input is at least provided by the user-operable catalog creation that is seen in Jain. As in claim 33, the resulting metadata is, at least in part...an item recognition data (Jain, col. 6 lines 56-60): Likewise, the remaining metadata tracks (Audio Classes 324, Speech 326, Speaker ID 328, Keywords 330) are each a parcel of metadata spanning a time period, and are extracted by their corresponding feature extractor shown in FIG. 9. The input thus supplied is made part of "a machine learning technique", where the machine learns of user's intentions as to the media information (claim 34).

As per independent claim 35, Jain teaches a media data store comprising one or more metadata-annotated, displayable items (Figure 2 item 178), and one that operates in conjunction with a presenter that presents a selected first displayable item from the media data store (col. 4 lines 25-30).

The difference between the claim and Jain rests in the "selector that selects a second displayable item from the media data store based, at least in part, on a relationship between a first metadata associated with the first displayed item and a second metadata associated with the second displayable item."

Duncombe teaches a system that allows the user to browser through video clips and that selects a second displayable item from the media data store based, at least in part, on a relationship between a first metadata associated with the first displayed item and a second metadata associated with the second displayable item (col. 2 lines 65-67): A further objective is to provide a media system that solicits

feedback from the user and modifies the media presentation in response to the feedback. The specifics of user desire in Duncombe create a relationship between what is seen first and what is seen second.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the viewing GUI taught by Jain to include a relationship-establishing playback arrangement as per Duncombe, in order to obtain a system that will retrieve digital media segments in better accordance with user preference. This will then handle the situation of retrieving the second displayable item in response to the user's feedback concerning the current item (claim 39).

7. Applicant's arguments filed 21 March 2005 have been fully considered but they are not persuasive.

At page 16 of the remarks applicant argues, concerning the rejection under 35 USC 101, that "the claimed invention reduces to a practical application that produces a useful, concrete, tangible result", which is in accordance with *AT&T v. Excel* as cited. However, the test in this situation is not whether the claimed invention has practical use or tangible ultimate results when implemented, but whether the "computer-readable medium" is in fact properly found within the four statutory classes of invention. Since the specification permits a "carrier wave", this is not tangible fixation in the kind of structure that would pass muster under the "process" or "manufacture" categories.

As per the applicability of Jain, applicant argues (pages 17 – 18) that "what is disclosed is merely a means of ***cataloging*** all media, not ***selecting*** scenes based upon criteria of the digital media". However, the Jain use of media analysis indeed is one in

which a selection process occurs, and one that is directed towards making the media collection properly searchable by an index. The Examiner also notes that the claims do not actually recite that the invention "can continuously analyze the media to facilitate intelligent search and retrieval". The Examiner cannot read in the amount applicant would seek to a phrase such as "selects a scene".

As per independent claims 43, 44, applicant argues at page 19 that "once the metadata is generated" in Jain, "subsequent searches for related media only entail a search of the metadata, not the media itself". However, all that actually appears is that "the metadata facilitates locating a related media item". This is met by Jain, who annotate the media with metadata for the purpose of initiating a search that locates the media information on the basis of such metadata, and in accordance with the user's indications (as particularly appears in independent claim 44).

As per Morris, applicant argues (page 20) that "Morris only stores ***metadata, not a metadata key that identifies an annotating metadata*** *associated with the clip identified with the clip identifier*". However, the metadata storage in Morris is sufficient to read upon the "metadata key" because it is simply an identification of metadata, and is also a "key" for further user selection, in those transmissions of commands that would involve "a requested user action".

As per the combination of Jain and Duncombe, applicant argues (pages 21 – 22) that "Duncombe only compares media with predetermined values; it does not evaluate relationships between the metadata". However, in permitting user-directed, criteria-responsive searches, Duncombe will in fact consider a "relationship" between data

items, such as those that can form the sequential "*playlist of related scenes*" that applicant alleges is missing at page 22. The assignment of metadata as per Jain will work in direct cooperation with such a search, and produce a series of "first" and "second" items whose access is directly formed by user desires.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond J. Bayerl whose telephone number is (571) 272-4045. The examiner can normally be reached on M - Th from 9:00 AM to 4:00 PM ET.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached on (571) 272-4048. All patent application related correspondence transmitted by FAX **must be directed** to the central FAX number (703) 872-9306.

11. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173